Original (for SUBMISSION)

0	For receiving Office use only		
D-1	International Application No.		
0-2	International Filing Date		
0-3	Name of receiving Office and "PCT International Application"		
0-4	Form PCT/RO/101 PCT Request		
0-4-1	Prepared Using	PCT-SAFE [EASY mode] Version 3.50 (Build 0002.162)	
0-5	Petition The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty		
0-6	Receiving Office (specified by the applicant)	Japan Patent Office (RO/JP)	
0-7	Applicant's or agent's file reference	F04-015PCT	
ı	Title of Invention	CONTROL OF ICE-CRYSTAL GROWTH BY NON-PROTEINACEOUS SUBSTANCE	
II	Applicant		
11-1	This person is	applicant only	
II-2	Applicant for	all designated States except US	
11-4	Name	NIPPON SHOKUBAI CO., LTD.	
11-5	Address	1-1, Koraibashi 4-chome, Chuo-ku, Osakashi, Osaka 5300005 Japan	
11-6	State of nationality	JP	
11-7	State of residence	JP	
III-1 ,	Applicant and/or inventor		
III-1-1	This person is	applicant and inventor	
III-1-2	Applicant for	US only	
III-1 -4	Name (LAST, First)	OBATA, Hitoshi	
III-1-5	Address	3-5, Mukonoso 6-chome, Amagasaki-shi, Hyogo 6610035 Japan	
III-1 - 6	State of nationality	JP	
III-1-7	State of residence	JP	



Original (for SUBMISSION)

III-2	Applicant and/or inventor		
III-2-1	This person is	applicant and inventor	
111-2-2	Applicant for	US only	
III-2 -4	Name (LAST, First)	KAWAHARA, Hidehisa	
III-2-5	Address	11-34, Nagaomotomachi 7-chome, Hirakata- shi, Osaka 5730163 Japan	
III-2 - 6	State of nationality	JP	
111-2-7	State of residence	JP	
III-3	Applicant and/or inventor		
III-3-1	This person is	applicant and inventor	
111-3-2	Applicant for	US only	
111-3-4	Name (LAST, First)	TOMITA, Takashi	
III-3-5	Address	2-23, Uenohigashi 1-chome, Toyonaka-shi, Osaka 5600013 Japan	
III-3-6	State of nationality	JP	
III-3-7	State of residence	JP	
IV-1	Agent or common representative; or address for correspondence The person identified below is hereby/ has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	agent	
IV-1-1	Name (LAST, First)	UEKI, Kyuichi	
IV-1-2	Address	Fujita-Toyobo Building 9th Floor, 1-16, Dojima 2-chome, Kita-ku, Osaka-shi, Osaka 5300003 Japan	
IV-1-3	Telephone No.	0663413431	
IV-1-4	Facsimile No.	0663416131	
IV-2	Additional agent(s)	additional agent(s) with same address as first named agent	
IV-2-1	Name(s)	SUGAWA, Tadashi	

Original (for SUBMISSION)

, 	DESIGNATIONS		
V-1	The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.		
VI-1	Priority claim of earlier national application		
VI-1-1	Filing date	22 October 2003 (22.	10.2003)
Vi-1-2	Number	2003-362427	
VI-1-3	Country	JP	
VI-2	Priority document request		
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1	
VII-1	International Searching Authority Chosen	Japan Patent Office	(ISA/JP)
VIII	Declarations	Number of declarations	
VIII-1	Declaration as to the identity of the inventor	-	
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	-	
VIII-3	Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	-	
VIII-4	Declaration of inventorship (only for the purposes of the designation of the United States of America)	-	
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	-	
IX	Check list	number of sheets	electronic file(s) attached
IX-1	Request (including declaration sheets)	4	✓
IX-2	Description	21	-
IX-3	Claims	2	-
IX-4	Abstract	1	✓
IX-5	Drawings	4	-
IX-7	TOTAL	32	

Original (for SUBMISSION)

		paper document(s) attached	electronic file(s) attached
	Accompanying Items	рарогостину	_
В	Fee calculation sheet		
-17	PCT-SAFE physical media		V
-18	other	revenue stamps as	
		the submission fee	
,		and search fee	
(-19	Figure of the drawings which should accompany the abstract	3	
K-20	Language of filing of the international application	English	
(-1	Signature of applicant, agent or common representative		
X-1-1	Name (LAST, First)	UEKI, Kyuichi	Dr.
X-1-2	Name of signatory		
X-1-3	Capacity		
X-2	Signature of applicant, agent or common representative		医光色
	Name (LAST, First)	SUGAWA, Tadashi	
X-2-1			
X-2-2	Name of signatory		
X-2-3	Capacity		

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/JP
10-6	Transmittal of search copy delayed until search fee is paid	

FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	